

PLATE XXVI.

FIG. 13. Stony ground in the upper end of the woods.

FIG. 14. Log on ground in woods showing sporophores of *Collybia platyphylla* and other fungi.

FIG. 15. Fallen trees and branches covered the floor of the woods in many places.

FIG. 16. Dead birch in woods attacked by *Polyporus betulinus*.

FIG. 17. Nest of *Formica exsectoides* found in some of the open spaces of the thicket.

FIG. 18. Dead trees in the woods showing sporophores of various fungi.

THE MALE OF CYMATODERA HORNI (CLERIDÆ; COL.).

BY A. B. WOLCOTT,

FIELD MUSEUM OF NATURAL HISTORY, CHICAGO, ILL.

A male specimen of *Cymatodera horni* Wolc. has very recently come into my possession. My sincere thanks are due Mr. Chas. Liebeck who, recognizing that this sex was not represented amongst my material, with great generosity presented me with a fine specimen of that sex. As the male has never been described, and as it was entirely unknown to me in nature, I could not include characters enabling its identification in the table of the species of *Cymatodera* (Proc. U. S. Nat. Mus., LIX, 1921, pp. 284-288) I hasten to record the characteristics of this sex, that the necessary additions may be made to the above-mentioned table, thus rendering it more complete.

The male of *Cymatodera horni* agrees with the female in having the elytral apices rounded, differing thus from *Cymatodera californica* in which both sexes have the elytral apices sinuate and the sutural angle sometimes prolonged. *C. horni* has the sides of the elytra very nearly truly parallel, more so than in the female of the same species, but the latter sex has the apical third of the elytra more strongly obliquely narrowed to the apex: The sides of the elytra are in the male of *C. californica* distinctly divergent posteriorly.

Cymatodera horni and *Cymatodera californica* are certainly very closely allied species, resembling each other so closely in form, size,

sculpture and color that examined superficially they would promptly be placed as but a single species. I am of the opinion, however, that *C. horni* is entitled to stand as a valid species, even though I have been unable to find any characters of apparent specific value other than the rounded elytral apices, the somewhat feebly different secondary sexual characters of the terminal abdominal somites and the rather dubious one of the form of the elytra; these in the aggregate, however, seem to be of sufficient weight to establish its specific validity. It may be well to remark in passing that in all specimens of *C. horni* that I have examined the median elytral fascia is quite distinct, much more so than in *C. californica*, and is of a more vivid red than in the latter species.

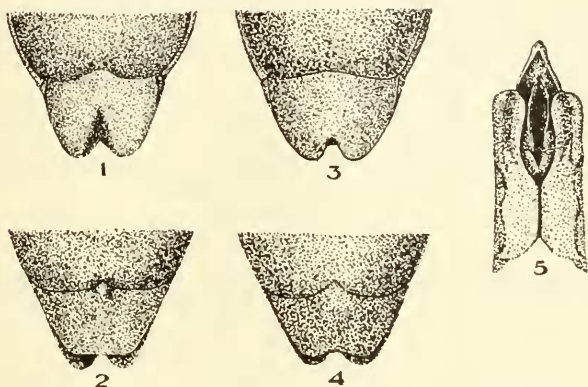
In order to facilitate comparison of the secondary sexual characters of the abdomen as observed in the male of *C. horni* and *C. californica* the following detailed descriptions are presented:

Horni has the fifth dorsal distinctly sinuate at apex with a pair of small, round, deep, medio-apical impressions (these perhaps adventitious); the sixth dorsal is much broader than long, its sides feebly, evenly rounded to apex, the latter rounded with a deep triangular emargination at middle, giving the apex the appearance of being bilobed, the surface is deeply excavated at middle from the apex to about the middle of the segment (text-figure 1). Fifth ventral broadly, feebly rounded at apex, the latter with a small but distinct excision at middle; sixth ventral wider at base than the corresponding dorsal, its sides nearly straight and strongly converging to the truncate apex, which is a little shorter than the sixth dorsal, the surface moderately and narrowly elevated medio-basally (text-figure 2).

Californica has the fifth dorsal broadly arcuate at apex; sixth dorsal one fourth broader than long, its sides a little more strongly rounded than in *horni*, apex rounded with a deep sub-parabolic excision at middle, the excavated area at apex of this excision very limited in extent (text-figure 3). Fifth ventral broadly rounded at apex, the latter deeply triangularly emarginate at middle; sixth ventral wider at base than last dorsal, its sides nearly straight, rather strongly narrowing to the broadly arcuate apex, which is shorter than the ultimate dorsal (text-figure 4).

Cymatodera horni was founded upon a female specimen from the

Santa Rita Mountains, Arizona, 5,000–8,000 ft. The male from which the foregoing characters are derived is from Phoenix, Arizona; it is (No. 1230) in my collection and is designated as the allotype of the species.



TEXT-FIGURE. 1 and 2. *Cymatodera horni* Wolc., terminal dorsal and ventral segments of abdomen, male. 3 and 4. *C. californica* Horn, the same. 5. *C. horni* Wolc., edeagophore, dorsal view.

The allotype is 21.0 mm. in length; 5.5 mm. in width at widest part, one fourth from elytral apices, and exactly 5.0 mm. in width at the humeri.

In both *C. horni* and *C. californica* the lobes of the sixth dorsal segment are rather densely clothed with long, pale yellowish, posteriorly directed hairs; these are purposely omitted in the figures as their presence would serve to obscure the outline of the parts involved. The "median fascia" of the elytra is not median, properly speaking, but distinctly ante-median in both the present species.

Believing that an examination of the primary sexual characters of the male would reveal some distinctive features, I had the edeagophore removed from a specimen of *C. horni* and *C. californica*, but the results viewed from a taxonomical point proved very disappointing, as the organs were found to be practically identical in all details, with the exception that in *C. horni* the apex of the apicale is obtusely rounded while in *C. californica* the apex is somewhat conical; in both species the distal portion is feebly deflected.

Edeagophore of *C. horni*, dorsal view, text-figure 5.

The edeagophore of *C. horni* and *C. californica* is much broader than in the majority of the species at present placed in the genus *Cymatodera*, at least this is true of all those I have had the opportunity to examine, but the breadth (proportionately) is nearly equal in *C. sirpata* Horn, being but slightly less broad. In many of our species these organs are very slender, the apicale but slightly and very gradually broader basally, the clava being in some instances greatly exerted. In *C. balteata* LeConte the distal portion of the apicale curves upward very strongly; this is the only species in which I have noticed this form of the apicale.

TWO NEW FORMS OF CICINDELA WITH REMARKS ON OTHER FORMS.

BY W. KNAUS,

McPHERSON, KAN.

The McPherson Scientific Expedition consisting of H. H. Ninger, Head of the Department of Biology of McPherson College; Forest Hoover, his assistant, and the writer spent eight weeks during July and August, 1921, in Southern Wyoming, Southwest Utah, Southwest Nevada and Southern California.

Among the new species of Coleoptera collected were: one new variety and one new form of *Cicindela*:—

Cicindela denverensis Csy., *propinqua*, new variety.

Similar in form and color to *denverensis* but smaller and with a shorter body. Color light green, with slight golden sheen on elytra except suture and elytral margin. Head and thorax similar to *denverensis*. The frontal declivity of head, the under sides of the thorax, and the legs covered with dense, erect, white vestiture. Sides of the abdominal segments sparsely clothed with decumbent white vestiture. Elytra without markings except a triangular dash of white at the apices. Length 9 mm, width 3.5 mm.

Ash Meadow, Nye County, Nevada. Altitude 2,050 feet, one specimen, a male, August 16, 1921. On mud at margin of stream. No other specimen seen in five days collecting. In the same vicinity were taken *Cicindela nevadica*, *C. tenuisignata*, *C. var. hæmorrhagica*,